

## **Section 7-1**

### **Natural Resource Districts/ Shoreland Performance Standards**

#### **7.1-1. Purposes (Amended 6/29/09)**

The purposes of this Article are to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to manage building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas.

#### **7.1-2. a. Applicability**

The provisions of this Article apply to all land areas within 250 feet, horizontal distance, of the:

- Normal high water line of any great pond or river,
- Upland edge of a coastal wetland, including all areas affected by tidal action, or
- Upland edge of a freshwater wetland, and

All land areas within 75 feet, horizontal distance, of the normal high-water line of a stream.

#### **b. Official Shoreland Zoning Map**

The areas to which this Article is applicable are divided into the following districts as shown on Zoning Map of the City of Saco, which is a part of this Ordinance:

- a. Resource Protection
- b. Saco River Overlay District
- c. Shoreland Overlay District
- d. Coastal Development Overlay District

## Resource Protection

The RP District shall include the areas shown as RP on the Official Zoning Map and the following areas when they occur within the limits of the shoreland zone as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435 et. seq., except that areas which are currently developed need not be included within the Resource Protection District:

1. Areas within 250 feet, horizontal distance, of the upland edge of salt marshes and salt meadows that are rated “moderate” or “high” value by Maine Department of Inland Fisheries and Wildlife (MDIF&W) as of January 1, 1973; and areas within 250 feet, horizontal distance, of the upland edge of freshwater wetlands and wetlands associated with rivers, which are rated "moderate" or "high" value waterfowl and wading bird habitat, including nesting and feeding areas, by the MDIF&W, that are depicted on a GIS data layer maintained by either MDIF&W or the DEP as of December 31, 2008; and the area within one hundred (100) feet, horizontal distance, of the upland edge of the unrated mapped freshwater wetlands along Stackpole Creek and the Nonesuch River.
2. Land areas within the 100 year flood plains adjacent to tidal waters as shown on FEMA's Flood Insurance Rate Maps or Flood Hazard Boundary Maps.
3. Areas of two or more contiguous acres with sustained slopes of 20% or greater.
4. Areas of two (2) or more contiguous acres with hydric soils and supporting wetland vegetation that are not part of a freshwater or coastal wetland as defined, and that are not surficially connected to a water body during the period of normal high water.
5. Land areas adjacent to tidal waters that are subject to severe erosion or mass movement, such as steep coastal bluffs.
6. All land areas within seventy-five (75) feet, horizontal distance, of the normal high-water line of a stream.
7. All land area within 250', horizontal distance, from the following natural features:

Cascade Brook Falls  
Nonesuch River Fault  
Saco Heath

8. All land area known as Stratton Island, Bluff Island, Ram Island and Eagle Island.
9. All land area currently being used as general public access to tidal beaches or the Saco River.
10. All land area within one hundred (100) feet, horizontal distance, of Philips Spring, Seal Rock Spring, Heath Road Spring and Jenkins Road Spring.
11. Areas designated by federal, state or municipal government as natural areas of significance to be protected from development, including:

Ferry Beach State Park  
Rachel Carson Wildlife Preserve.

### **Saco River Overlay District**

The Saco River Overlay District includes all lands subject to the jurisdiction of the Saco River Corridor Commission. The Overlay District includes all lands adjacent to the Saco River to a distance of five hundred (500) feet as measured on a horizontal plane from the mean high water line of the river or to the edge of the 100-year flood plain if the flood plain extends beyond five hundred (500) feet, up to a maximum of one thousand (1,000) feet from the mean high water line.

### **Shoreland Overlay District**

The Shoreland Overlay District includes all lands subject to Shoreland Zoning as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435 et. seq. that are not included in the Resource Protection District or the Saco River Overlay District.

This Section also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending beyond the normal high-water line of a water body or within a wetland. In addition, this Section applies to various areas listed on the State Register of Critical Areas. The provisions of this Article are in addition to the provisions of the underlying zone.

### **Coastal Development Overlay District**

The Coastal Development Overlay District includes all lands subject to Shoreland Zoning as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435

et. seq. that are not included in the Resource Protection District, the Shoreland Overlay Zone or the Saco River Overlay District.

This Section also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending beyond the normal high-water line of a water body or within a wetland. In addition, this Section applies to various areas listed on the State Register of Critical Areas. The provisions of this Article are in addition to the provisions of the underlying zone.

### **c. Effective Date**

**1. Effective Date of Ordinance and Ordinance Amendments.** This Article, which was amended by the municipal legislative body on June 29, 2009, shall not be effective unless approved by the Commissioner of the Department of Environmental Protection. A certified copy of the Article as amended, attested and signed by the Municipal Clerk, shall be forwarded to the Commissioner for approval. If the Commissioner fails to act on this Article amendment within forty-five (45) days of his/her receipt of the amendment, it shall be automatically approved.

Any application for a permit submitted to the municipality within the forty-five (45) day period shall be governed by the terms of this Article as amended if the amendment is approved by the Commissioner.

**B. Repeal of Municipal Timber Harvesting Regulation.** The municipal regulation of timber harvesting activities is repealed on the statutory date established under 38 M.R.S.A. section 438-B(5), at which time the State of Maine Department of Conservation's Bureau of Forestry shall administer timber harvesting standards in the shoreland zone. On the date established under 38 M.R.S.A section 438-B(5), the following provisions of this Ordinance are repealed:

- Section 7.1-12. Timber Harvesting;
- Section 410-15.13. RP Resource Protection District Selective timber harvesting according to a plan approved by a forester registered in the State of Maine on a non-commercial basis; and
- Section 3. Definitions, the definition of "forest management activities".

NOTE: The statutory date established under 38 M.R.S.A. section 438-B(5) is the effective date of state-wide timber harvesting standards. That date is "the first day of January of the 2<sup>nd</sup> year following the year in which the Commissioner of Conservation determines that at least 252 of the 336 municipalities identified by the Commissioner of Conservation as the municipalities with the highest acreage of timber harvesting activity on an annual basis for the period 1992-2003 have either accepted the state-

wide standards or have adopted an ordinance identical to the state-wide standards.” 38 M.R.S.A. section 438-A(5) further provides that “the Commissioner of Conservation shall notify the Secretary of State in writing and advise the Secretary of the effective date of the state-wide standards.”

### **7.1-3. Land Use Standards**

Activities within the districts subject to these requirements shall conform with the following additional dimensional requirements.

#### **7.1-3.1 Minimum Lot Requirements**

1. The minimum lot size and lot area per dwelling unit for uses in the Resource Protection District are set forth in Table 412-1.
2. The minimum lot size and minimum lot area per dwelling unit in the Saco River Overlay District shall be the requirements of the underlying district unless a larger lot is required by the Corridor Commission’s requirements.
3. The minimum lot size and minimum lot area per dwelling unit in the Shoreland Overlay District and the Coastal Development Overlay District shall be the requirements of the underlying district.
4. If more than one residential dwelling unit, principal governmental, institutional, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit, principal structure, or use.

#### **7.1-3.2 Minimum Shorefront Requirements**

1. Lots in the Resource Protection District shall have a minimum shore frontage of two hundred (200) feet.
2. Lots in the C-1 or R-1a Districts subject to the Saco River, Coastal Development Overlay or Shoreland Overlay provisions shall have a minimum shore frontage of one hundred fifty (150) feet.
3. Lots in all other districts subject to the Saco River, Coastal Development Overlay or Shoreland Overlay provisions shall have a minimum shore frontage of one hundred (100) feet.

4. If more than one residential dwelling unit, principal governmental, institutional, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit, principal structure, or use.

#### 7.1-3.3 Minimum Lot Width

Within one hundred (100) feet, horizontal distance, of the normal high water line of a water body or upland edge of a wetland, the minimum width of any portion of any lot shall be equal to or greater than the required shore frontage for the proposed use.

#### 7.1-4 **Principal and Accessory Structures**

1. All new principal and accessory structures shall be set back from the normal high-water line of freshwater bodies, the Maximum Spring High Tide Level (MHHW) of tidal waters, and the upland edge of a wetland, depending upon the district in which they are located as shown in Table 412-1.
2. The water body or wetland setback provision shall neither apply to structures which require direct access to the water as an operational necessity, such as piers, docks and retaining walls, nor to other functionally water-dependent uses.
3. The lowest floor elevation or openings of all buildings and structures including basements shall be elevated at least one foot above the elevation of the 100 year flood, the flood of record, or in the absence of these, the flood as defined by soil types identified as recent flood plain soils. Accessory structures may be placed in accordance with City Code Chapter 106. Floodplain Management, and need not meet the elevation requirements of this paragraph.
4. The total footprint area of all structures, parking lots and other non-vegetated surfaces within a resource protection district, shoreland overlay district, conservation district, or residential district shall not exceed twenty (20) percent of the lot or a portion thereof, located within the shoreland zone, including areas previously developed. In a business or industrial district including the B-5 Marine Business and Residential District, the total area of all structures, parking lots and other non-vegetated surfaces shall not exceed seventy (70) percent.

The total footprint area of all buildings shall not exceed twenty (20) percent of a lot, or a portion thereof located within the Coastal Development Overlay District. For the purposes of this Article, a building is a structure designed for habitation, shelter, storage, or as a gathering place that has a roof. For the purposes of this rule, the foundation is considered to be a part of the building. A porch with a roof, attached to the exterior walls of a building, is considered part of the building.

The total developed area shall not exceed forty (40) percent of a lot, or a portion thereof located within the Coastal Development Overlay District. For the purposes of this Article, development is the alteration of property for human-related use including, but not limited to buildings, decks, driveways, parking areas, lawns, landscaped areas, and areas of non-native vegetation, and any other appurtenant facilities, but excluding temporary structures.

5. Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the Code Enforcement Officer, to provide shoreline access in areas of steep slopes or unstable soils provided that the structure is limited to a maximum of four (4) feet in width; that the structure does not extend below or over the normal high-water line of a water body or upland edge of a wetland, (unless permitted by the Department of Environmental Protection pursuant to the Natural Resources Protection Act, 38 M.R.S.A. section 480-C); and that the applicant demonstrates that no reasonable access alternative exists on the property.
6. For principal structures, water and wetland setback measurements shall be taken from the top of a coastal bluff that has been identified on Coastal Bluff maps as being “highly unstable” or “unstable” by the Maine Geological Survey pursuant to its “Classification of Coastal Bluffs” and published on the most recent Coastal Bluff map. If the applicant and the permitting official(s) are in disagreement as to the specific location of a “highly unstable” or “unstable” bluff, or where the top of the bluff is located, the applicant may at his or her expense, employ a Maine Registered Professional Engineer, a Maine Certified Soil Scientist, a Maine State Geologist, or other qualified individual to make a determination. If agreement is still not reached, the applicant may appeal the matter to the Board of Appeals.
7. On a non-conforming lot of record on which only a residential structure exists, and on which it is not possible to place an accessory structure meeting the required setbacks whether from water body, tributary stream or wetlands, the Code Enforcement Officer may issue a permit to place a single accessory structure not to exceed eighty (80) square feet in area nor eight (8) feet in height, with no utilities, for the storage of yard tools and similar equipment. The accessory structure shall be located as far from the shoreline or tributary stream or wetland as practical and shall meet all other applicable standards, including lot coverage and vegetation clearing standards. The accessory structure shall not be located closer to the shoreline, tributary stream or wetland than the principal structure.
8. Retaining walls that are not necessary for erosion control shall meet the structure setback requirement, except for low retaining walls and associated fill, provided each of the following conditions are met:

- a) The site has been previously altered and an effective vegetated buffer does not exist;
- b) The wall is at least 25 feet, horizontal distance, from the normal high-water line of a water body, tributary stream, or upland edge of a wetland;
- c) The site where the retaining wall will be constructed is legally existing lawn or is a site eroding from lack of naturally occurring vegetation, and which cannot be stabilized with vegetative plantings;
- d) The total height of the wall, in the aggregate, is not more than 24 inches;
- e) Location is outside the 100-year floodplain on rivers, streams, coastal wetlands, and tributary streams, as designated on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or Flood Hazard Boundary Maps;
- f) The area behind the wall is revegetated with grass, shrubs, trees, or a combination thereof, and no further structural development will occur within the setback area, including patios and decks; and
- g) A vegetated buffer area is established within 25 feet, horizontal distance, of the normal high-water line of a water body, tributary stream, or upland edge of a wetland when a natural buffer area does not exist. The buffer area must meet the following characteristics:
  - (i) The buffer must include shrubs and other woody and herbaceous vegetation. Where natural ground cover is lacking, leaf or bark mulch or an equivalent alternative acceptable to the Code Enforcement Officer shall be utilized;
  - (ii) Plantings, native species only, shall be installed to retard erosion and provide for effective infiltration of stormwater runoff;
  - (iii) A minimum buffer width of 15 feet, horizontal distance, is required, measured perpendicular to the normal high-water line or upland edge of a wetland
  - (iv) A footpath no greater than four feet in width may traverse the buffer at a right angle.
- (h) All permits required by the Maine DEP and/or other regional, state or federal agencies shall have been issued prior to the start of work.

**Piers, Docks, Wharves, And Other Marine Structures Extending Over Or Below The Normal High-Water Line Of A Water Body, Or Within A Wetland**

**1. PERFORMANCE STANDARDS**

All applications for temporary piers, docks, wharves and other marine structures shall be reviewed by the Code Enforcement Officer, and all applications for permanent piers, docks, wharves and other marine structures shall be reviewed by the Planning Board. All



such applications shall be reviewed for conformance with the following standards listed below.

If the reviewing authority is unable to reach a decision using the criteria below due to either inconclusive or conflicting information, the reviewing authority will require the applicant to submit an environmental impact analysis assessing the proposal's impact on natural areas, including impacts of the proposed structure in conjunction with other adjacent or abutting structures.

The reviewing authority may also require that the proposal be modified to ensure conformance with the standards set forth below. Mitigation measures may include, but are not limited to, changes in the design and construction of the marine structure, or changes in magnitude, duration, and location of activities carried out at the marine structure.

An application shall be approved by the reviewing authority if there is a finding that:

- a) Access from the shore shall be developed on soils appropriate for such use, as determined through consultation with the local Soil and Water Conservation District Office. Whenever possible, access from the shore to the marine structure shall be placed on bedrock. Measures shall be taken to minimize soil erosion both during and after construction.
- b) The proposed location of the marine structure shall not unreasonably interfere with access to existing marine structures or points of public access, nor shall it unreasonably interfere with existing developed or natural beach areas.
- c) The marine structure shall be designed, sited, and constructed to mitigate unreasonable adverse impacts on significant wildlife habitats or unique natural areas including, but not limited to: fin fish and shellfish fisheries, salt marshes, eel grass beds, shorebird feeding and nesting habitats, critical fish spawning and nursery areas, etc.
- d) Unreasonable interference with the natural flow of any surface or subsurface waters, or impedance of the flow of the current of any river or channel shall be minimized during the construction and subsequent use of the marine structure.
- e) The marine structure shall be designed, sited, and constructed so as not to encroach upon Federally designated navigation channels or mooring areas or otherwise obstruct by any means whatsoever the free use of piers, docks, and other common landing places.

- f) The marine structure shall be no larger than necessary to accomplish the purposes for which it is designed, notwithstanding the dimensional limits listed below. Its size and construction shall not change the intensity of the adjoining land use, and by no means shall exceed a total distance of more than 1/3 the width of the water body, when proposed for coastal or inland waterways. The applicant may request a variance from the dimensional requirements due to the additional requirement of handicap access or unusual wind or wave conditions.

	Max. Width	Max. Length
Private Piers	Six (6) ft.	100 ft.*
Commercial Piers	Twelve (12) ft.	100 ft.*
Ramps	Four (4) ft.	As appropriate
Docks, Floats	200 sq. ft	

\* landward of the mean low water line

- g) New subdivisions that propose docks as part of the subdivision, shall provide a community dock in lieu of the development of docks on individual lots. The applicant may request a variance for additional community docks provided a demonstrated need can be shown for the additional facilities.
- h) No new structure shall be built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high-water line of a water body or within a wetland unless the structure requires direct access to the water as an operational necessity.
- i) No existing structures built on, over or abutting a pier, dock, wharf or other structure extending beyond the normal high-water line of a water body or within a wetland shall be converted to residential dwelling units in any district.
- j) Except in business districts including the Marine Business and Residential District, structures built on, over or abutting a pier, wharf, dock or other structures extending beyond the normal high-water line of a water body or within a wetland shall not exceed twenty (20) feet in height above the pier, wharf, dock or other structure.
- k) New permanent piers and docks on non-tidal waters shall not be permitted unless it is clearly demonstrated to the Planning Board that a temporary pier or dock is

not feasible, and a permit has been obtained from the Department of Environmental Protection, pursuant to the Natural Resources Protection Act.

**2. APPLICATION SUBMISSION REQUIREMENTS**

In addition to the information listed in Article XI of this Ordinance, Site Plan Review, all applications shall contain the following information:

- a) A photocopy of relevant locational maps indicating the site of the project;
- b) Site plan, plan and section drawings (to scale) of the proposed structure, including an indication on separate scale drawings of any shoreline stabilization or other modification required by the project;
- c) A complete list of materials to be used, including a list of all intended coatings (paint, etc) for all proposed marine structures.

**7.1- 6. Campgrounds**

Campgrounds shall conform to the minimum requirements imposed under State Licensing procedures, Section 703 of this Ordinance, and the following:

1. Campgrounds shall contain a minimum of five thousand (5,000) square feet of land, not including roads and driveways, for each site. Land supporting wetland vegetation, and land below the normal high-water line of a water body shall not be included in calculating land area per site.
2. The areas intended for placement of a recreational vehicle, tent or shelter, and utility and service buildings shall be set back a minimum of seventy-five (75) feet, horizontal distance, from the normal high-water line of water bodies, tributary streams, or the upland edge of a wetland.

**7.1- 7. Parking Areas**

1. In addition to the requirements of Section 708 of this Ordinance, parking areas shall meet the shoreline and tributary stream setback requirements for structures for the district in which such areas are located, except that in the Marine Business and Residential District parking areas shall be set back at least twenty-five (25) feet from the normal high-water line or the upland edge of a wetland. The setback requirement for parking areas serving public boat launching facilities in other districts may be reduced to no less than fifty (50) feet from the normal high-water line or upland edge of a wetland if the Planning Board finds that no other reasonable alternative exists.
2. Parking areas shall be designed to prevent stormwater runoff from flowing directly into a water body, and where feasible, to retain all runoff on-site.
3. All parking spaces shall be nine (9) feet wide and eighteen (18) feet long, except that parking spaces for a vehicle and boat trailer shall be forty (40) feet long.

**7.1-9. Roads And Driveways**

The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.

1. Roads and driveways shall be set back at least seventy-five (75) feet, horizontal distance, from the normal high-water line of water bodies, tributary streams, or the upland edge of a wetland unless no reasonable alternative exists as determined by the Planning Board. If no other reasonable alternative exists, the road and/or driveway setback requirement shall be no less than fifty (50) feet, horizontal distance, upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.

On slopes of greater than twenty (20) percent the road and/or driveway setback shall be increased by ten (10) feet, horizontal distance, for each five (5) percent increase in slope above twenty (20) percent.

This paragraph shall neither apply to approaches to water crossings nor to roads or driveways that provide access to permitted structures, and facilities located nearer to the shoreline due to an operational necessity.

2. Existing public roads may be expanded within the legal road right-of-way regardless of its setback from a water body, tributary stream or wetland.
3. New roads and driveways are prohibited in a Resource Protection District except to provide access to permitted uses within the district, or as approved by the Planning Board upon a finding that no reasonable alternative route or location is available outside the district, in which case the road and/or driveway shall be set back as far as practicable from the normal high-water line of a water body, tributary stream, or upland edge of a wetland.
4. Road and driveway banks shall be no steeper than a slope of two (2) horizontal to one (1) vertical, and shall be graded and stabilized in accordance with the provisions for erosion and sedimentation control contained in Section 7.1-13.
5. Road and driveway grades shall be no greater than ten (10) percent except for short segments of less than two hundred (200) feet.
6. In order to prevent road and driveway surface drainage from directly entering water bodies, tributary streams or wetlands, roads and driveways shall be designed, constructed, and maintained to empty onto an unscarified buffer strip at least (50) feet plus two times the average slope, in width between the outflow point of the ditch or culvert and the normal high-water line of a water body, tributary stream, or upland edge of a wetland. Surface drainage which is directed

to an unscarified buffer strip shall be diffused or spread out to promote infiltration of the runoff and to minimize channelized flow of the drainage through the buffer strip.

7. Ditch relief (cross drainage) culverts, drainage dips and water turnouts shall be installed in a manner effective in directing drainage onto unscarified buffer strips before the flow gains sufficient volume or head to erode the road, driveway or ditch. To accomplish this, the following shall apply:

- a. Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road or driveway at intervals no greater than indicated in the following table:

Grade (Percent)	Spacing (Feet)
0–2	250
3–5	200–135
6–10	100–80
11–15	80–60
16–20	60–45
21+	40

- b. Drainage dips may be used in place of ditch relief culverts only where the grade is ten (10) percent or less.
    - c. On sections having slopes greater than ten (10) percent, ditch relief culverts shall be placed at approximately a thirty (30) degree angle down slope from a line perpendicular to the centerline of the road or driveway.
    - d. Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be established with appropriate materials.
8. Ditches, culverts, bridges, dips, water turnouts and other storm water runoff control installations associated with roads and driveways shall be maintained on a regular basis to assure effective functioning.

#### **7.1-10 Mineral Exploration and Extraction**

Mineral exploration to determine the nature or extent of mineral resources shall be accomplished by hand sampling, test boring, or other methods which create minimal disturbance of less than one hundred (100) square feet of ground surface. A permit from the Code Enforcement Officer shall be required for mineral exploration which exceeds

the above limitation. All excavations, including test pits and holes shall be immediately capped, filled or secured by other equally effective measures, so as to restore disturbed areas and to protect the public health and safety.

Mineral extraction may be permitted under the following conditions:

1. A reclamation plan shall be filed with, and approved by the Planning Board before a permit is granted. Such plan shall describe in detail procedures to be undertaken to fulfill the requirements of paragraph 4 below.
2. No part of any extraction operation, including drainage and runoff control features shall be permitted within seventy-five (75) feet, horizontal distance, of the normal high-water line of any water body, tributary stream, or the upland edge of a wetland. Extraction operations shall not be permitted within one hundred and fifty (150) feet, horizontal distance, of any property line.
3. Gravel pits within the shoreland zone shall be set back as far as practicable from the normal high-water line and no less than seventy-five (75) feet and screened from the river by existing or planted landscaping vegetation.
4. Within twelve (12) months following the completion of extraction operations at any extraction site, which operations shall be deemed complete when less than one hundred (100) cubic yards of materials are removed in any consecutive twelve (12) month period, ground levels and grades shall be established in accordance with the following:
  - a. All debris, stumps, and similar material shall be removed for disposal in an approved location, or shall be buried on-site. Only materials generated on-site may be buried or covered on-site.
  - b. The final graded slope shall be two to one (2:1) slope or flatter.
  - c. Top soil or loam shall be retained to cover all disturbed land areas, which shall be reseeded and stabilized with vegetation native to the area. Additional topsoil or loam shall be obtained from off-site sources if necessary to complete the stabilization project.
5. In keeping with the purposes of this Ordinance, the Planning Board may impose such conditions as are necessary to minimize the adverse impacts associated with mineral extraction operations on surrounding uses and resources.

#### **7.1-11. Agriculture**

1. All spreading of manure shall be accomplished in conformance with the *Manure Utilization Guidelines* published by the Maine Department of Agriculture on November 1, 2001, and the Nutrient Management Law (7 M.R.S.A. sections 4201-4209).
2. Manure shall not be stored or stockpiled within three hundred (300) feet horizontal distance, of a water body, tributary stream, or wetland. All manure storage areas within the shoreland zone must be constructed or modified such that the facility produces no discharge of effluent or contaminated storm water.
3. Agricultural activities involving tillage of soil greater than forty thousand (40,000) square feet in surface area, within the shoreland zone shall require a Conservation Plan to be filed with the Planning Board. Non-conformance with the provisions of said plan shall be considered to be a violation of this Ordinance.
4. There shall be no new tilling of soil within seventy-five (75) feet, horizontal distance, from water bodies; nor within twenty-five (25) feet, horizontal distance, of tributary streams, and wetlands. Operations in existence on the effective date of this ordinance and not in conformance with this provision may be maintained, provided that such tilling is conducted in accordance with a Soil and Water Conservation Plan.
5. Newly established livestock grazing areas shall not be permitted within seventy-five (75) feet, horizontal distance, of water bodies, nor within twenty-five (25) feet, horizontal distance of tributary streams, and wetlands. Livestock grazing associated with on-going farm activities, and which are not in conformance with the above setback provisions may continue, provided that such grazing is conducted in accordance with a Conservation Plan.

#### **7.1-12. Timber Harvesting**

1. Timber harvesting shall conform with the following provisions:
  - a. Selective cutting of no more than forty (40) percent of the total volume of trees four (4) inches or more in diameter measured at 4 1/2 feet above ground level on any lot in any ten (10) year period is permitted. In addition:
    - i. Within seventy-five (75) feet, horizontal distance, of the normal high-water line of water bodies, tributary streams, or the upland edge of a wetland, there shall be no clearcut openings and a well-distributed stand of trees and other vegetation, including existing ground cover, shall be maintained.

- ii. At distances greater than seventy-five (75) feet, horizontal distance, of the normal high-water line of water bodies or the upland edge of a wetland, harvesting operations shall not create single clear cut openings greater than ten-thousand (10,000) square feet in the forest canopy. Where such openings exceed five-thousand (5,000) square feet, they shall be at least one hundred (100) feet, horizontal distance, apart. Such clearcut openings shall be included in the calculation of total volume removal. Volume may be considered to be equivalent to basal area.
- b. No accumulation of slash shall be left within fifty (50) feet, horizontal distance, of the normal high-water line of a water body. In all other areas slash shall either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than four (4) feet above the ground. Any debris that falls below the normal high-water line of a water body or tributary stream shall be removed.
- c. Timber harvesting equipment shall not use stream channels as travel routes except when:
  - i. Surface waters are frozen; and
  - ii. The activity will not result in any ground disturbance.
- d. All crossings of flowing water shall require a bridge or culvert, except in areas with low banks and channel beds which are composed of gravel, rock or similar hard surface which would not be eroded or otherwise damaged.
- e. Skid trail approaches to water crossings shall be located and designed so as to prevent water runoff from directly entering the water body or tributary stream. Upon completion of timber harvesting, temporary bridges and culverts shall be removed and areas of exposed soil re-vegetated.
- f. Except for water crossings, skid trails and other sites where the operation of machinery used in timber harvesting results in the exposure of mineral soils, shall be located such that an unscarified strip of vegetation of at least seventy-five (75) feet, horizontal distance, in width for slopes up to ten (10) percent shall be retained between the exposed mineral soil and the normal high-water line of a water body or upland edge of a wetland. For each ten (10) percent increased slope, the unscarified strip shall be increased by twenty (20) feet, horizontal distance. The provisions of this paragraph apply only to a face sloping toward the water body or wetland, provided, however, that no portion of such exposed mineral soil on a back face shall be closer than twenty five (25), horizontal distance, feet from the normal high-water line of a water body or upland edge of a wetland.

### **7.1-13. Clearing or Removal of Vegetation For Activities Other Than Timber Harvesting**



1. Within a Resource Protection District, the cutting or removal of vegetation shall be limited to that which is necessary for uses expressly authorized in that district and shall be demonstrated on a lot clearing plan to be presented to the CEO or Planning Board as appropriate.
2. In areas that are not in RP, except to allow for the development of permitted uses, within seventy-five (75) feet, horizontal distance, from any water body, tributary stream, or the upland edge of a wetland, a buffer strip of vegetation shall be preserved as follows:
  - a. There shall be no cleared opening greater than two hundred fifty (250) square feet in the forest canopy (or other existing woody vegetation if a forested canopy is not present) as measured from the outer limits of the tree or shrub crown. However, a footpath not to exceed six (6) feet in width as measured between tree trunks and/or shrub stems is allowed provided that a cleared line of sight to the water through the buffer strip is not created.
  - b. Selective cutting of trees within the buffer strip is allowed provided that a well distributed stand of trees and other natural vegetation is maintained. For the purposes of this section, a "well-distributed stand of trees" adjacent to water bodies, tributary streams, and wetlands, is defined as maintaining a minimum rating score of 16 or more per 25-foot by 50-foot rectangular area (1250 square feet) as determined by the following rating system.

Diameter of Tree at 4-1/2 feet Above Ground Level (inches)	Points
2 - <4 in.	1
4 - <8 in.	2
8 - <12 in.	4
12 in. or greater	8

- c. For the purposes of Section 7.1-13.2.b “other natural vegetation” is defined as retaining existing vegetation under three (3) feet in height and other ground cover and retaining at least five (5) saplings less than two (2) inches in diameter at four and one-half (4 ½) feet above ground level for each 25-foot by 50-foot rectangular area. If five (5) saplings do not exist, no woody stems less than two (2) inches in diameter can be removed until 5 saplings have been recruited into the plot.

Notwithstanding the above provisions, no more than forty (40) percent of the total volume of trees four (4) inches or more in diameter, measured at 4 1/2 feet above ground level may be removed in any ten (10) year period.

- d. Pruning of tree branches, on the bottom 1/3 of the tree is allowed.
- e. In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings, these openings shall be replanted with native tree species unless existing new tree growth is present.
- f. In order to protect water quality and wildlife habitat, existing vegetation under three (3) feet in height and other ground cover, including leaf litter and the forest duff layer, shall not be cut, covered, or removed, except to provide for a footpath or other permitted uses as described above.

The provisions contained in paragraph 2 above shall not apply to those portions of public recreational facilities adjacent to public swimming areas. Cleared areas, however, shall be limited to the minimum area necessary.

- 3. At distances greater than seventy-five (75) feet, horizontal distance, from the normal high-water line of any water body, tributary stream, or the upland edge of a wetland, there shall be allowed on any lot, in any ten (10) year period, selective cutting of not more than forty (40) percent of the volume of trees four (4) inches or more in diameter, measured 4 1/2 feet above ground level. Tree removal in conjunction with the development of permitted uses shall be included in the forty (40) percent calculation. For the purposes of these standards, volume may be considered to be equivalent to basal area.

In no event shall cleared openings for any purpose, including but not limited to, principal and accessory structures, driveways, lawns and sewage disposal areas, exceed in the aggregate, 25% of the lot area within the shoreland zone or ten thousand (10,000) square feet, whichever is greater, including land previously cleared. This provision shall not apply industrial or business districts including the Marine Business and Residential District.

- 4. Legally existing nonconforming cleared openings may be maintained, but shall not be enlarged, except as allowed by this Section.
- 5. Fields and other cleared openings which have reverted to primarily shrubs, trees, or other woody vegetation shall be regulated under the provisions of this section.

#### **7.1-14. Erosion and Sedimentation Control**

- 1. All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall also require a written soil erosion and sedimentation control plan. The plan shall be

submitted to the permitting authority for approval and shall include, where applicable, provisions for:

- a. Mulching and re-vegetation of disturbed soil.
  - b. Temporary runoff control features such as hay bales, silt fencing or diversion ditches.
  - c. Permanent stabilization structures such as retaining walls or riprap.
2. In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.
3. Erosion and sedimentation control measures shall apply to all aspects of a proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.
4. Any exposed ground area shall be temporarily or permanently stabilized within one (1) week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine (9) months of the initial date of exposure. In addition:
  - a. Where mulch is used, it shall be applied at a rate of at least one (1) bale per five hundred (500) square feet and shall be maintained until a catch of vegetation is established.
  - b. Anchoring the mulch with netting, peg and twine or other suitable method may be required to maintain the mulch cover.
  - c. Additional measures shall be taken where necessary in order to avoid siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.
5. Natural and man-made drainage ways and drainage outlets shall be protected from erosion from water flowing through them. Drainage ways shall be designed and constructed in order to carry water from twenty-five (25) year storm or greater, and shall be stabilized with vegetation or lined with riprap. (Amended 4/3/02)

#### **7.1-15 Septic Waste Disposal**

All subsurface sewage disposal systems shall be installed in conformance with the State of Maine Subsurface Wastewater Disposal Rules, and the following:

- a) Clearing or removal of woody vegetation necessary to site a new system and any associated fill extension, shall not extend closer than seventy-five (75) feet, horizontal distance, from the normal high water line of a water body or the upland edge of a wetland;
- b) A holding tank is not allowed for a first-time residential use in the shoreland zone.

#### **7.1-16 Soils**

All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, improper drainage, and water pollution, whether during or after construction. Proposes uses requiring subsurface wastewater disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation and be prepared by state-certified professionals. Certified persons may include Maine Certified Soils Scientists, Maine Registered Professional Engineers, Maine State Certified Geologists and other persons who have training and experience in the recognition and evaluation of soil properties. The report shall be based upon the analysis of the characteristics of the soil and surrounding land and water areas, maximum ground water elevation, presence of ledge, drainage conditions, and other pertinent data which the evaluator deems appropriate. The soils report shall include recommendations for a proposed use to counteract soil limitations where they exist.

#### **7.1-17 Water Quality**

No activity shall deposit on or into the ground or discharge to the water of the State any pollutant that, by itself or in combination with other activities or substances, will impair designated uses of the water classification of the water body, tributary stream or wetland.

#### **7.1-18 Archaeological Site**

Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Authority prior to rendering a decision on the application.

*(Note: The Maine DEP issued Department Order #80-09 conditionally approving the Saco Zoning Ordinance as adopted on June 29, 2009, with a single condition: that the italicized text in the paragraph below be deleted. This condition is reflected in the text of Section 7.1).*

### **Resource Protection**

The RP District shall include the areas shown as RP on the Official Zoning Map and the following areas when they occur within the limits of the shoreland zone as mandated by the State of Maine Mandatory Shoreland Zoning Act 38 M.R.S.A. § 435 et. seq., except that areas which are currently developed or lots that appear on a recorded subdivision plan which has obtained municipal approval and Site Location of Development approval or an NRPA permit prior to the effective date of this amendment need not be included within the Resource Protection District: